The **Photon series** presents SATA3 interfaces in a standard 2.5” Form Factor pSLC and MLC Flash Drive. Asine AS25_HCF flash drive delivers performance and proven reliability for data and mission critical systems. Added benefits of flexibility are built into Asine’s AS25_HCF storage systems, including easy field firmware upgrades and expandable storage capacity as flash disk capacities increase. The AS25_HCF drives support OEM application specific features such as **AES-256 bit hardware encryption**, **fast sanitize erase**, high grade industrial certified metal & workmanship, and more. Product is compliant to JGPSSI-JIG, REACH, and RoHS.

**Sustained performance test:**

- Industrial & Commercial PC / Tablet Systems
- JBOD, NAS, SAN, RAID
- Data warehouse
- Security, HLS-Home Land Security
- ATM, Gaming, Lottery
- Automotive, Navigation, Infotainment, ECU
- Point Of Sale- POS / Kiosk, Smart Terminals
- Medical
- Industrial & Airborne Systems
- Rugged Computer
- High-Speed Data Recording
- Video Surveillance, JPEG2000 Capture
- Factory Automation
The AS25-SATA3_HCF is a top reliable high performance mass storage Solid-State Disk with no moving parts, ideal to meet the reliability requirements for high quality storage, data store, video and audio servers, as well as broadcasting systems and general computing. The AS25_HCF drives are designed to withstand long life true full capacity, while operating without compromising data integrity.

### Features

- **Highest quality MLC & pSLC Flash technology**
- **1000GB to 16,000GB MLC and for pSLC up to 8,000GB of non-volatile (per model)**
- Flash memory in a 2.5" form factor
- SATA1, SATA2 & SATA3 interfaces. Protocol SATA 3.1 AHCI
- All modes to PIO3,4 & to UDMA5 of SATA interface, ATA8 standard compliance
- **Fast sanitize erase** for entire media (few seconds typical) capacity dependent
- Operating temperature – Commercial 0°C to +70°C and Industrial -40°C to +85°C
- Storage temperature -60°C to +95°C
- Humidity 5% to 95% relative, non-condensing
- Altitude – operating -1000 ft. to 70,000 ft.
- High data transfer rate: ≥ 500 MB/Sec Sustained Read or Write (capacity, technology & file system dependent)
- IOPS 4KB up to 80K random Read & 70K Write (overall capacity dependent)
- **Reliability – MTBF** 2,000,000 hours based on Telcordia
  - Embedded EDC/ECC, Bad Block Mapping and Management
  - Built-in power-up self test and automatic self-diagnostics
  - Wear-Leveling Algorithm: Dynamic & Static wear leveling
- **Power:** 2.7 W @ 1000GB. 0.8 W on Idle
- **TBW** up to 1000 overall with 4TB of MLC SSD, up to 2000 for 8TB SSD
- **TBW** up to 10,000 overall with 4TB of pSLC SSD
- No special drivers - uses existing Windows, Linux, VxWorks®, and SATA drivers
- Standard, Industrial, and pSLC models
- **SSD unit sustain environmental**
  - Shock (operating and non-operating) 1,000 G/0.5ms
  - Vibration - Operating: 2.17 GRMS (5-700 Hz)
  - Non-Operating: 3.13 GRMS (5-800 Hz)
- Dimensions:
  100.2 L X 70 W X H
  H= 7 mm. 9.5 mm at 8TB MLC/4TB pSLC
- Weight: 80 gr. typ.

### Dimensions

<table>
<thead>
<tr>
<th>Capacity</th>
<th>C/E/Z, H, M options-</th>
<th>t</th>
<th>C</th>
<th>0°C to +70°C</th>
<th>E</th>
<th>0°C to +70°C</th>
<th>Z</th>
<th>0°C to +70°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>1000 GB</td>
<td></td>
<td></td>
<td>-25°C to +75°C</td>
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<td>-25°C to +75°C</td>
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<td>2000</td>
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<td>-40°C to +85°C</td>
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<tr>
<td>4000</td>
<td>4000 GB</td>
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<td>-40°C to +85°C</td>
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<tr>
<td>8000</td>
<td>8000 GB</td>
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<td>-40°C to +85°C</td>
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<td>016T</td>
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<td>-40°C to +85°C</td>
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</tbody>
</table>

Net capacity depends on Operating System

**Ordering Example:**

AS25-SATA3-4000-2M is a 2.5" SSD with 4000GB MLC Flash, SATA3, operating at -40°C to +85°C

**Ordering Information:**

P/N Structure: AS25-[SATA3]-[cap][t][c][f][h][m]

**Remark:** Consult factory for allowable P/N’s combinations

**Remark:** Consult factory for allowable P/N’s combinations